JUN 2 1 2001

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1645

**TECH CENTER 1600/2900** 

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/698,213A

DATE: 05/21/2001

TIME: 10:43:56

**ENTERED** 

Input Set : A:\SeqList.txt

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2 <110> APPLICANT: McIninch, James
 4 <120> TITLE OF INVENTION: COMPUTATIONAL NUCLEIC ACID CODING AND FEATURE ANALYSIS
 6 <130> FILE REFERENCE: 04983.0220.00US00
 8 <140> CURRENT APPLICATION NUMBER: 09/698,213A
10 <141> CURRENT FILING DATE: 2000-10-30
12 <160> NUMBER OF SEQ ID NOS: 13
14 <170> SOFTWARE: PatentIn version 3.0
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 2165
18 <212> TYPE: DNA
19 <213> ORGANISM: Arabidopsis thaliana
21 <220> FEATURE:
22 <221> NAME/KEY: unsure
23 <222> LOCATION: (1)...(2165)
24 <223> OTHER INFORMATION: Unsure at all n locations
26 <220> FEATURE:
27 <223> OTHER INFORMATION: Ecotype Landsberg, genomic DNA
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32 cggtttttcc gagcattgta ggccgtcctc gccacaccgg tgtgatggtt gggatgggac
                                                                         120
34 aaaaggatgc ttatgttgga gacgaggctc aatcaaaacg tggtatcttg actctgaagt
                                                                          180
36 acccaattga gcatggaatt gttaataatt gggatgacat ggagaagatt tggcatcaca
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38 ctttctacaa tgagcttcgt gttgcccctg aagaacatcc ggttctcttg accgaagctc
                                                                          300
 40 ctctcaatcc gaaagctaac cgtgagaaga tgactcagat catgtttgag acattcaata
                                                                          360
 42 ctcctgctat gtatgttgcc attcaagctg ttctctcact ctatgccagt ggccgtacta
                                                                          420
 44 ctggtcagta cattactaca ttctttttat accgtttggt tgaaataaaa ttcggtttgg
                                                                          480
 46 ttcgattcga gtttgctctc attattttta ttttgttggt taggtattgt tttggactcc
 48 ggagatggtg tgagccacac ggtaccaatc tacgagggtt atgcacttcc acacgcaatc
                                                                          600
 50 etgegtettg atettgeagg tegtgaceta accgaceace ttatgaaaat cetgacagag
                                                                          660
 52 cgtggttact ctttcaccac aactgctgag cgtgagattg ttagagacat gaaggagaag
                                                                          720
 54 ctctcttaca ttgccttgga ctttgaacaa gagctcgaga cttccaaaac aagctcatcc
                                                                          780
 56 gttgagaaga gcttcgagct gccagacggt caagtgatca ccatcggggc agagcgtttc
                                                                          840
 58 cgatgccctg aagttctgtt tcagccatcg atgatcggaa tggaaaatcc gggaattcat
                                                                          900
 60 gaaactactt acaactcaat catgaaatgt gatgtggata tcaggaagga tctttatgga
                                                                          960
 62 aacattgtgc ttagtggtgg caccacaatg ttcgatggga ttggtgatag gatgagtaaa
                                                                         1020
 64 gagatcacag cgttggctcc aagcagtatg aacatcaaag tggtggctcc accggaaagg
 66 aagtacagtg tetggategg tggetetate ttggetteee teagtacttt eeageaggta
                                                                         1140
 68 aattacttac tatacttaat acataaagtc tattagtgat ttgatgtata aagtgttaca
                                                                         1200
 70 aaaatgtgtt ccaaatttgc agatgtggat tgcgaaagcg gagtatgatg aatctggacc
                                                                         1260
 72 gtcaatcgtc cacaggaagt gcttctgatc aaaagtcacc aagtaaaaca agagcggtaa
                                                                         1320
 74 aaattttgat atcagttttt caccetgaag ccagttgcta taattactca caacttctet
                                                                         1380
 76 atttgtgttc ttttattctt gtccctcgtt gttcatttta atctctttt tgcaacaaag
                                                                         1440
 78 caacttaaaa aaacagagca gtcattaaca gaatgttatt attatatat tgtatacata
                                                                         1500
 80 ttagtataca cccattattt cattaaaaca tttatcatat aaggatagga ttctatacat
                                                                         1560
 82 cgatatattt attttgttga cactattcag cacatgctta tgtcttatct tgttagtata
                                                                         1620
 84 tgtaaccaaa gacaaataat agatgctaca aattgtttc tttgaagcaa aaatttcaat
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 86 cttaaaattg ttttttcca ggttacacaa aaaaaacttg tagtttgtaa attttctata
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RAW SEQUENCE LISTING DATE: 05/21/2001 TIME: 10:43:56

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88 caattttggg gatctcaaca agaacatgaa cttcaacttc tagtcatatg acgacctgag
    90 tetgegegge tgtgaatete tttgetgeag taaatgttta caagtggtgt gtaaattggt
                                                                             1860
     92 actgattcaa aagctttaag aaatctacac atttcgtgaa attatttagc agacttgata
                                                                             1920
     94 ttaaaaatct aggataaaat gactatccaa agacaaatag gactgtttca catgttcccc
     96 tgattettgt ageteataac teateageag ttaaetttte taeeteatae aegetegeaa
W--> 98 tncgtttgga attatcagct ntaatttttc taattctttg gaaattatta gcagctcgat
     100 caaatggggc atggcttctt cttctatctg caactcatct aaactttcca tgaagaaaca
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                                                                              2165
     102 aagct
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     107 <212> TYPE: PRT
     108 <213> ORGANISM: Unknown
     110 <220> FEATURE:
     111 <223> OTHER INFORMATION: Describes a predicted protein sequence
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     115 1
     118 <210> SEQ ID NO: 3
     119 <211> LENGTH: 7
     120 <212> TYPE: PRT
     121 <213> ORGANISM: Unknown
     123 <220> FEATURE:
     124 <223> OTHER INFORMATION: Describes a predicted protein sequence
     126 <400> SEQUENCE: 3
      127 Ala Val Leu Ala Thr Pro Val
      128 1
      131 <210> SEQ ID NO: 4
      132 <211> LENGTH: 21
      133 <212> TYPE: PRT
      134 <213> ORGANISM: Unknown
      136 <220> FEATURE:
      137 <223> OTHER INFORMATION: Describes a predicted protein sequence
      139 <400> SEQUENCE: 4
      140 Trp Leu Gly Trp Asp Lys Arg Met Leu Met Leu Glu Thr Arg Leu Asn
      141 1
      143 Gln Asn Val Val Ser
      144
      147 <210> SEQ ID NO: 5
      148 <211> LENGTH: 35
      149 <212> TYPE: PRT
      150 <213> ORGANISM: Unknown
      152 <220> FEATURE:
      153 <223> OTHER INFORMATION: Describes a predicted protein sequence
      155 <400> SEQUENCE: 5
      156 Ser Thr Gln Leu Ser Met Glu Leu Leu Ile Ile Gly Met Thr Trp Arg
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      159 Arg Phe Gly Ile Thr Leu Ser Thr Met Ser Phe Val Leu Pro Leu Lys
                                           25
                      20
      160
      162 Asn Ile Arg
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PATENT APPLICATION: US/09/698,213A TIME: 10:43:56

Input Set : A:\SeqList.txt

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168 <212> TYPE: PRT
169 <213> ORGANISM: Unknown
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172 <223> OTHER INFORMATION: Describes a predicted protein sequence
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175 Leu Thr Glu Ala Pro Leu Asn Pro Lys Ala Asn Arg Glu Lys Met Thr
                   5
178 Gln Ile Met Phe Glu Thr Phe Asn Thr Pro Ala Met Tyr Val Ala Ile
                                   25
179 20
181 Gln Ala Val Leu Ser Leu Tyr Ala Ser Gly Arg Thr Thr Gly Gln Tyr
                               40
182 35
184 Ile Thr Thr Phe Phe Leu Tyr Arg
185 50
188 <210> SEQ ID NO: 7
189 <211> LENGTH: 191
190 <212> TYPE: PRT
191 <213> ORGANISM: Unknown
193 <220> FEATURE:
194 <223> OTHER INFORMATION: Describes a predicted protein sequence
196 <400> SEQUENCE: 7
197 Ser Gly Asp Gly Val Ser His Thr Val Pro Ile Tyr Glu Gly Tyr Ala
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198 1
200 Leu Pro His Ala Ile Leu Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr
                                   25
201 20
203 Asp His Leu Met Lys Ile Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr
                               40
      35
206 Thr Ala Glu Arg Glu Ile Val Arg Asp Met Lys Glu Lys Leu Ser Tyr
                           55
207 50
209 Ile Ala Leu Asp Phe Glu Gln Glu Leu Glu Thr Ser Lys Thr Ser Ser
                                           75
                       70
210 65
212 Ser Val Glu Lys Ser Phe Glu Leu Pro Asp Gly Gln Val Ile Thr Ile
                                       90
                    85
213
215 Gly Ala Glu Arg Phe Arg Cys Pro Glu Val Leu Phe Gln Pro Ser Met
                                   105
                100
218 Ile Gly Met Glu Asn Pro Gly Ile His Glu Thr Thr Tyr Asn Ser Ile
                                                125
                                120
           115
221 Met Lys Cys Asp Val Asp Ile Arg Lys Asp Leu Tyr Gly Asn Ile Val
                                              140
                           135
 222 130
 224 Leu Ser Gly Gly Thr Thr Met Phe Asp Gly Ile Gly Asp Arg Met Ser
                                           155
                     150
 225 145
 227 Lys Glu Ile Thr Ala Leu Ala Pro Ser Ser Met Lys Ile Lys Val Val
                                       170
                   165
 228
 230 Ala Pro Pro Glu Arg Lys Tyr Ser Val Trp Ile Gly Gly Ser Ile
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                180
 234 <210> SEQ ID NO: 8
 235 <211> LENGTH: 13
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RAW SEQUENCE LISTING DATE: 05/21/2001 PATENT APPLICATION: US/09/698,213A TIME: 10:43:56

Input Set : A:\SeqList.txt

Output Set: N:\CRF3\05212001\1698213A.raw

236 <212> TYPE: PRT 237 <213> ORGANISM: Unknown 239 <220> FEATURE: 240 <223> OTHER INFORMATION: Describes a predicted protein sequence 242 <400> SEQUENCE: 8 243 Val Pro Asn Leu Gln Met Trp Ile Ala Lys Ala Glu Tyr 244 1 247 <210> SEQ ID NO: 9 248 <211> LENGTH: 26 249 <212> TYPE: PRT 250 <213> ORGANISM: Unknown 252 <220> FEATURE: 253 <223> OTHER INFORMATION: Describes a predicted protein sequence 255 <400> SEQUENCE: 9 256 Asn Leu Asp Arg Gln Ser Ser Thr Gly Ser Ala Ser Asp Gln Lys Ser 257 1 . 5 259 Pro Ser Lys Thr Arg Ala Val Lys Ile Leu 260 20 263 <210> SEQ ID NO: 10 264 <211> LENGTH: 56 265 <212> TYPE: PRT 266 <213> ORGANISM: Unknown 268 <220> FEATURE: 269 <223> OTHER INFORMATION: Describes a predicted protein sequence 271 <400> SEQUENCE: 10 273 Asn Ser Ser Ala Val Asn Phe Ser Thr Ser Tyr Thr Leu Ala Ile Arg 274 1 5 10 276 Leu Glu Leu Ser Ala Leu Ile Phe Leu Ile Ser Leu Glu Ile Ile Ser 277 20 25 279 Ser Ser Ile Lys Trp Gly Met Ala Ser Ser Ser Ile Cys Asn Ser Ser 280 35 40 282 Lys Leu Ser Met Lys Lys Gln Ser 283 50 286 <210> SEQ ID NO: 11 287 <211> LENGTH: 194 288 <212> TYPE: PRT 289 <213> ORGANISM: Unknown 291 <220> FEATURE: 292 <223> OTHER INFORMATION: Describes a predicted protein sequence 294 <400> SEQUENCE: 11 295 Ser Gly Asp Gly Val Ser His Thr Val Pro Ile Tyr Glu Gly Tyr Ala 296 1 10 298 Leu Pro His Ala Ile Leu Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr 20 30 301 Asp His Leu Met Lys Ile Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr 35 40 304 Thr Ala Glu Arg Glu Ile Val Arg Asp Met Lys Glu Lys Leu Ser Tyr 55 307 Ile Ala Leu Asp Phe Glu Gln Glu Leu Glu Thr Ser Lys Thr Ser Ser

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/698,213A

DATE: 05/21/2001
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Input Set : A:\SeqList.txt

```
308 65
 310 Ser Val Glu Lys Ser Phe Glu Leu Pro Asp Gly Gln Val Ile Thr Ile
                     85
 313 Gly Ala Glu Arg Phe Arg Cys Pro Glu Val Leu Phe Gln Pro Ser Met
 314
                 100
                                     105
 316 Ile Gly Met Glu Asn Pro Gly Ile His Glu Thr Thr Tyr Asn Ser Ile
             115
                                 120
                                                      125
 319 Met Lys Cys Asp Val Asp Ile Arg Lys Asp Leu Tyr Gly Asn Ile Val
                             135
                                                  140
 322 Leu Ser Gly Gly Thr Thr Met Phe Asp Gly Ile Gly Asp Arg Met Ser
                         150
 325 Lys Glu Ile Thr Ala Leu Ala Pro Ser Ser Met Lys Ile Lys Val Val
 326
                    165
                                         170
 328 Ala Pro Pro Glu Arg Lys Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu
                 180
 331 Ala Ser
 334 <210> SEQ ID NO: 12
 335 <211> LENGTH: 9
 336 <212> TYPE: PRT
 337 <213> ORGANISM: Unknown
 339 <220> FEATURE:
 340 <223> OTHER INFORMATION: Describes a predicted protein sequence
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 344 1
347 <210> SEQ ID NO: 13
348 <211> LENGTH: 296
 349 <212> TYPE: PRT
350 <213> ORGANISM: Arabidopsis thaliana
352 <220> FEATURE:
353 <223> OTHER INFORMATION: Ecotype columbia, describes actin
355 <400> SEQUENCE: 13
357 Met Glu Lys Ile Trp His His Thr Phe Tyr Asn Glu Leu Arg Val Ala
360 Pro Glu Glu His Pro Val Leu Leu Thr Glu Ala Pro Leu Asn Pro Lys
                20
                                    25
363 Ala Asn Arg Glu Lys Met Thr Gln Ile Met Phe Glu Thr Phe Asn Thr
            35
366 Pro Ala Met Tyr Val Ala Ile Gln Ala Val Leu Ser Leu Ala Ser Gly
                            55
369 Arg Thr Thr Gly Gly Ile Val Leu Asp Ser Gly Asp Gly Val Ser His
                        70
                                            75
372 Thr Val Pro Ile Tyr Glu Gly Tyr Ala Leu Pro His Ala Ile Leu Arg
                    85
375 Leu Asp Leu Ala Gly Arg Asp Leu Thr Asp His Leu Met Lys Ile Leu
376
                100
                                    105
378 Thr Glu Arg Gly Tyr Ser Phe Thr Thr Thr Ala Glu Arg Glu Ile Val
           115
                                120
381 Arg Asp Met Lys Glu Lys Leu Ser Tyr Ile Ala Leu Asp Phe Glu Gln
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/698,213A

DATE: 05/21/2001 TIME: 10:43:57

Input Set : A:\SeqList.txt

Output Set: N:\CRF3\05212001\1698213A.raw

 $L\!:\!98~M\!:\!341~W\!:$  (46) "n" or "Xaa" used, for SEQ ID#:1